

B9036

MAWILA

DEPARTMENT OF ENVIRONMENTAL QUALITY
 AIR QUALITY DIVISION
 ACTIVITY REPORT: Scheduled Inspection

B903646015

FACILITY: BUCKEYE PIPE LINE HOLDINGS, L.P.- TAYLOR TERMINAL		SRN / ID: B9036
LOCATION: 24801 ECORSE RD, TAYLOR		DISTRICT: Detroit
CITY: TAYLOR		COUNTY: WAYNE
CONTACT: Kimberly Trostel , Senior Air Compliance Specialist		ACTIVITY DATE: 09/10/2018
STAFF: C. Nazaret Sandoval	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY 2018 Scheduled Inspection		
RESOLVED COMPLAINTS:		

SRN: B9036

SOURCE: Buckeye Pipe Line Holdings, L.P. Taylor Terminal (BTT)

ADDRESS: 24801 Ecorse Road, Michigan 48217

INSPECTION DATE: 9/10/2018

INSPECTOR: Nazaret Sandoval - MDEQ, Air Quality Division

BUCKEYE PERSONNEL PRESENT:

Brad Crawford – Sr. Operations Manager/ Wayne Pipeline & Terminal Asset Team

Richard A. Zeestraten – Terminal Operator

MAIN COMPLIANCE CONTACT: Kimberly Trostel, Sr. Specialist - Air Compliance

ktrostel@buckeye.com)

1 - FACILITY DESCRIPTION

The Buckeye Terminal at Taylor (BTT) is a petroleum products storage and distribution facility. Petroleum products are received via pipeline and pumped into tanks for storage in the tank farm for later distribution to the delivery vessels at the loading rack. The additives are received into the tank farm via trucks.

The terminal has a six-lane bay with four loading arms. Two of the loading arms (1 and 2) were inactive at the time of the inspection and they have not been used since 2006. During 2006 the business operations at BTT experienced a shift and the distribution of gasoline was discontinued. Since then the facility is primarily utilized as a jet fuel distribution terminal with flexibility to load a limited amount of transmix (slop mixtures of different petroleum distillates). Loading arm #3 is used for the distribution of jet fuel and loading arm #4 for transmix loading.

2 - PERMIT BACKGROUND AND REGULATORY ANALYSIS

According to AQD records the original terminal was owned by British Petroleum (BP). There are several permits issued by Wayne County to BP during the nineties (from 1990 to 1998). The permits authorized the operation of the terminal. Then, around the year 2000, Buckeye Pipe Line Holdings, Inc. bought the terminal and all permits were transferred to Buckeye. In 1998 the Wayne County permits were all consolidated into two AQD permits identified as PTI 558-95 (Loading Rack and Vapor Recovery Unit -VRU) and PTI 559-95 (11 petroleum products storage tanks and four horizontal additive tanks). The PTIs were issued on 1/14/1998. During the records review for this inspection it was noticed that the Wayne County permits (which have already been incorporated into the cited AQD PTIs) remain listed on the AQD permit database. AQD will proceed to void them after the completion of the inspection report.

In 2017, BTT requested the removal of the Internal Floating Roof (IFR) from tank No. 4 and submitted a permit application to AQD. On 3/22/2017 AQD issued PTI 15-17 to include the

modification of tank No. 4. PTI 558-95 and PTI 559-95 were voided because the equipment is now covered by PTI 15-17.

State Permit:

The terminal is an existing opt-out source regulated under PTI 15-17. BTT accepted material limits for the loading of gasoline and distillate to restrict the facility's potential to emit below the major source threshold (100 tons of VOC per year) and opt-out of the Title V program (Renewable Operating Permit Program - ROP).

PTI 15-17 continues to include the same enforceable limits for volatile compounds (VOC) and hazardous air pollutants (HAP) previously specified in permits PTI 558-95 and PTI 559-95. However, in PTI 15-17 the emission units were consolidated into FGFACILITY; consequently the 12-month rolling VOC and HAPs emission limits specified in the individual PTIs issued in 1995 were added in PTI 15-17 to apply to FGFACILITY.

When this facility was first permitted, various state rules under Part 6 applied to the terminal operations. Part 6 establishes the emission limitations and prohibitions for existing sources of VOC emissions. However, around 2006 all gasoline and ethanol fuel truck loading operations ceased and BTT shut down the Vapor Recovery Unit (VRU) because vapor control was not required. In a letter dated December 1, 2005 from BTT to AQD (copy attached to this report), BTT explained that they have determined the VRU was not needed for loading jet fuel, transmix or distillate fuels at the truck loading rack.

They also explained that if gasoline distribution is not occurring at the terminal, the facility is not subject to Rules 608, Rule 609 and the definition of gasoline per Rule 107 (a) does not apply to products such as jet-fuel or transmix. The quantity of Transmix product of volatile component loaded would be maintained below 5 million gallons per year so that the VRU is not needed for the control of VOC emissions (which has been the case).

The letter of December 1, 2005 also explains that with the shift in business the facility would still maintain the status of ROP "opt-out source" for VOCs and minor source for HAPs. BTT estimated the potential truck rack VOC emissions when only Jet-fuel and Transmix are loaded and the VRU is not used. The results showed that the loading rack estimated tons per year of VOC were substantially below those permitted by PTI 558-95 while loading gasoline. For added flexibility, BTT has kept all the applicable provisions and requirements for gasoline handling/operations in the current permit, PTI 15-17. If BTT resumes gasoline truck loading in the future, the VRU shall be reactivated.

Federal Regulations:

NSPS - New Source Performance Standards (NSPS)

NSPS applies to new and/or modified sources. Some of the NSPS that could potentially apply to the storage tanks in this terminal (K, Ka, Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels) are not applicable because this is an existing facility with storage tanks installed between 1953 and 1971. In addition, the changes/modification in product stored and/or tanks configurations that have occurred after that date did not qualify as "modifications" per the definition given by the cited NSPS regulations.

This facility has the capability of delivering gasoline and the loading racks that deliver the product into the tank trucks could potentially be subject to the provisions of NSPS - Subpart XX (Bulk Gasoline Terminals). However, records in AQD files indicate that the truck rack and the VRU were installed prior 12/17/1980 and therefore they are not subject to subpart XX.

NESHAP - National Emission Standards for Hazardous Air Pollutants

These standards have been established in 40 CFR 63 to control the emissions of HAPs. NESHAP establish Maximum Achievable Control Technology (MACT) standards for specific types of equipment at qualifying facilities. MACT regulations typically apply to facilities that are major sources for HAPs. BTT is a synthetic minor source of hazardous air pollutant (HAP) emissions because the potential emissions of any single HAP regulated by the Clean Air Act, Section 112 is less than 10 tons per year and the potential emissions for all HAPs combined are less than 25 tons per year. However, there are area sources MACTs could potentially apply to BTT.

Our records show that as part of the permit application submitted to AQD in 2017 when tank No. 4 was modified, BTT's consultants conducted an analysis of specific MACT standards to determine their applicability to BTT operations. The following MACTs were evaluated: Subpart R, EEEE, BBBB, OO, WW and CCCC. The outcome of their evaluation indicated that except for Subpart BBBB, none of the listed MACTs were found to be applicable to BTT.

AQD has not accepted delegation to enforce and/or implement Subpart BBBB. Therefore, the regulation was not evaluated in this inspection and will not be discussed further.

3 - COMPLAINTS/COMPLIANCE HISTORY

The last inspection conducted by AQD at this facility was on 4/1/2014. Our records show that there are no outstanding violations for this facility since the last inspection. Similarly, there have not been citizen complaints received by the AQD's Detroit Office related to fallout or odors attributed to the Buckeye Terminal at Taylor (BTT).

4 - INSPECTION DESCRIPTION

On 9/10/2018, I arrived at BTT at about 7 AM to conduct a facility inspection. I was greeted by the terminal operator, Mr. Richard Zeestraten and by the Sr. Operator Manager, Mr. Brad Crawford. They both were present during the inspection meetings and during the terminal tour.

After the introductions, I stated the purpose of the inspection, which was to evaluate the facility's compliance with respect to the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), and the requirements and special provisions of permit to install, PTI 15-17.

I requested the facility records, including terminal loading rates, emission reports and site operation and maintenance records. Most of the site operation and emission records were obtained from the central corporate system "BEST" (Buckeye Emission System) which supports all Buckeye's terminals. That information was provided via email by Kimberly Trostel. Tank maintenance records, as well as summary reports of the tanks inspections and the repairs were also obtained via email from Ms. Trostel. The operational records (i.e. routine checklists, etc.) were handed out by BTT's terminal operator during the inspection meeting.

The following documents and records were provided by Buckeye as part of the inspection conducted on 9/10/2018:

- 1.- Terminal lay-out drawing with the location of storage tanks and the loading rack
- 2.- Air emissions inventory records for reporting period from August 1, 2017 to July 31, 2018
- 3.- Jet fuel report of analysis dated September 8, 2018
- 4.- Dow Chemical Safety Data Sheet (SDS) for Jet Fuel Additive
- 5.- Monthly True Vapor Pressure (TVP) calculations for transmix loading
- 6.- Samples of the certification forms for the tank-trucks pressure/vacuum tests
- 7.- Routine in-service storage tanks inspection checklists
- 8.-Tanks inspection schedules
- 9.- Most recent out of service tanks inspection reports (Tanks No. 3, 4, 5 and 7)

The air emission inventory report contains: a) 12-month rolling VOC and HAPs emission records for FGFACILITY, b) 12-month rolling throughput for product loading, c) monthly reports for transmix loading rack throughput and 12-month rolling emission records for VOC, d) 12-month rolling records supporting the handling of transmix below 5 million gallons per year.

The special conditions and the applicable requirements cited on PTI 15-17 were examined. After our discussion and record collection, we toured the plant. The tanks and the associated above-ground piping appeared to be in good condition. The VRU was not connected to the system. There were no unpleasant odors detected at the facility premises. During the drive-around the tank farm, I asked the operator to identify the tanks and their content. All tanks (Nos. 1 to 7) except tank No. 6 – the transmix tank - are for Jet Fuel storage. There are other smaller horizontal and vertical tanks, most of them empty. The four cone-roof vertical tanks No. 8, 9, 10 and 11 located at the east corner of the property by the Buckeye Pipeline Manifold are out of service. These tanks used to store ethanol when gasoline was delivered. Tanks No. 13 to 18 are horizontal tanks. Tanks No. 13, 14, 15 and 16 are located near the facility entrance, east of the office building. Tanks No. 13 and 14 store jet-fuel additives. Tank No.15 is also used for the storage of additives, but was empty and out of service. Tank No. 16, used for the storage of red dye when diesel was loaded, was empty. Tank No. 17 is a small tank located by the transmix loading rack. This tank is used for the disposal of the waste collected from the “white bucket test”. The white bucket is a simple but reliable test done by the tank-truck drivers to determine the cleanliness quality of the jet-fuel loaded (i.e. detection of significant amounts of water and particulates). The waste held in Tank No. 7 is pumped to Tank No.6 (the transmix tank). Tank No. 18, near the SW pond is a contact tank part of the water/oil separator system. For details about the type of tank (fixed roof tank – VFRT or internal floating roof tank IFRT) refer to the attached summary table labeled “Tanks Inspection Schedule”.

At the end of the tank farm route we stopped at the loading rack. There wasn't any truck loading while I was inspecting this area. I observed the Jet-Fuel Filter Banks, which is the filtration system that eliminates water and particles from the Jet-Fuel before it is loaded to the tank-trucks. This process is a closed system and there is no venting to the atmosphere. We returned to the office to wrap-up the inspection. I left the facility around 10:30 AM.

5 - COMPLIANCE EVALUATION - PTI 15-17

The collected records were examined and compliance with permit limits was evaluated. This evaluation covers records for the period from August 1, 2017 to July 31, 2018. Refer to the attached records labeled by BTT for each permit condition. For convenience, the permit

conditions are summarized below.

EMISSION LIMITS (SC I. 1 to I.4) –In Compliance

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Highest Recorded Values	Compliance
I.1 VOC	88.5	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	10.27 (end of Aug. 2017)	YES
I.2 HAPs	7.85	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	0.37 (end of Aug. 2017)	YES
I.3 VOC	80.0 mg/liter of gasoline loaded	Monthly average	EULOADRACK emissions through control	VRU disconnected	N/A
I.4 VOC	2.28 mg/liter of distillate loaded	Monthly average	EULOADRACK emissions through control	VRU disconnected	N/A

MATERIAL LIMITS (SC II.1 and II.2) – In Compliance

Material	Limit	Time Period / Operating Scenario	Equipment	Highest Recorded Values	Compliance
II.1 gasoline	146MM gallons	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	gasoline loading has been discontinued since 2006	N/A
II.2 distillate	300MM gallons	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	268 MM gallons (end of Oct. 2017)	YES

PROCESS/OPERATIONAL RESTRICTIONS – Permit condition needs to be reevaluated
SC III.1 - The permittee shall install, maintain and operate in a satisfactory manner, a vapor tight collection line which delivers the organic vapor to a loading rack control device when loading any delivery vessel with an organic compound having a true vapor pressure greater than 1.5 psia, or when loading a delivery vessel which has previously contained an organic

compound having a true vapor pressure greater than 1.5 psia.

According to the records, the current operations at BTT include the handling of transmix via pipeline and truck-loading. Depending of the batch of transmix that the facility receives from the pipeline and the temperature (winter of summer) of the product, the calculated RVP could vary from above 1 psia to over 6 psia, and the estimated True Vapor Pressure (TVP) could be above 1.5 psi. The records for transmix loading show that the highest 12-month rolling volume handled at the loading racks during the evaluated period was 4,718,523 gallons per year, reported at the end of August 2017.

SC III.1 was written when BTT anticipated as much as 146 million gallons of gasoline throughput for the facility . This special permit condition should be reevaluated to determine if the disengaging of the VRU is appropriate, as inferred by the Part 6 rules.

DESIGN/EQUIPMENT PARAMETERS – In Compliance

SC IV.1 - The permittee shall not operate EUTANK7 unless it is equipped with an internal floating roof (IFR) that has welded construction and is equipped with liquid mounted primary seals.

This condition is carried over from the previous permit (SC 17 in PTI 559-95) when gasoline loading was occurring. There have not been changes to Tank No.7. The tank has an IFR that has welded construction and it is equipped with a mechanical shoe as the primary seal. It seems like this condition should also be re-evaluated and/or rewritten because there are other tanks with IFRs that are not cited here. Special condition (SC 16) in PTI 559-95 mentioned something specific about the IFR in tanks 4, 6 and 7.

All tanks are routinely inspected (refer to sample checklist attached). BTT maintains a tank schedule for the more comprehensive out of service inspections. The internal coating for jet-fuel tanks have to be inspected frequently and replaced as needed. The most recent work/repair has been done in Tank No. 3 (modified inspection May 23, 2018). One of the tasks performed was the replacement of the epoxy coating. Tank No. 5 was re-evaluated on August 2, 2018 to verify if previous inspections recommendations were executed. For details refer to the attached inspection reports.

TESTING/SAMPLING (SC V.1) & MONITORING/RECORDKEEPING (SC VI.1) – Not Applicable

Verification of VOC emission rates from the loading rack via the VRU by stack testing may be required. Verification of emission rates includes the submittal of a complete report of the test results (SC V.1).

The permittee shall keep in a satisfactory manner, a written record of all carbon replacement, repairs and maintenance to the Vapor Recovery Unit (SC VI.1).

The VRU has been disconnected after the cessation of gasoline loading in 2006.

MONITORING/RECORDKEEPING

SC VI.1 – In Compliance

The permittee shall keep in a satisfactory manner, records of the EULOADRACK throughput of each specific petroleum product for each calendar month and 12-month rolling time period. The permittee shall keep these records on file and make them available to AQD upon request. Records shall be maintained on file for a period of five years.

Records are maintained adequately and were provided as requested by AQD. For the list of records provided refer to the "Inspection Narrative" and the attachment.

6 - MAERS 2017

The MAERS 2017 was reviewed and audited. The facility passed the audit. For audit details, please refer to MACES report in the facility file.

7 - COMPLIANCE STATUS

Based on the inspection conducted on 9/10/2018, Buckeye Pipe Line Holdings, L.P. Taylor Terminal (BTT) was found to be operating in substantial compliance with the applicable state and federal air regulations. However, AQD identified existing permit conditions that appear to pertain to gasoline loading which require further evaluation to determine if they can and should be modified to reflect the cessation of gasoline storage and loading.

NAME *S. Andoval*

DATE *9/25/2018*

SUPERVISOR *JK*